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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* AROUGG JBIRA

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Appeal 2008-2851  
Application 10/511,211  
Technology Center 2600

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Decided: November 25, 2008

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Before MAHSHID D. SAADAT, ROBERT E. NAPPI,  
and KARL D. EASTHOM, *Administrative Patent Judges*.

EASTHOM, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from a final rejection of claim 6. Claim 7 has been allowed. No other claims are pending. (App. Br. 3). We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

### STATEMENT OF THE CASE

Appellant's invention relates to an optical disc reader whereby the disc reader is able to use less than the maximum number of tracks that can be read by an optical pickup. Data from the tracks being used is streamed to buffers that are dynamically defined and sized in a memory bank according to the number of tracks being used, so that each buffer size is greater than would be the case if all the tracks were being used. (Spec. 3).

Claim 6, the only claim on appeal, reads as follows:

6. A multitrack optical disc reader comprising:

a multitrack optical pick up for reading data from multiple tracks of an optical disc and outputting data from each track in respective data streams;  
and

a memory bank in which first-in-first-out (FIFO) buffers for temporarily storing data from the respective data streams may be dynamically defined, wherein the reader can use less than the maximum number of tracks such that when less than the maximum number of tracks are used, only FIFO buffers for data streams for those tracks used are defined, and wherein each of the FIFO buffers defined has a size equal to the total FIFO memory that can be defined in the memory bank divided by the number of tracks being used.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Dahan

US 6,137,763

Oct. 24, 2000

IBM Technical Disclosure Bulletin, *Algorithm for Managing Multiple First-In, First-Out Queues from a Single Shared Random-Access Memory*, Vol. 32, No. 3B, pp. 488-492 (August 1989) (*hereinafter* "IBMTDB").

Claim 6 stands rejected under 35 U.S.C. § 103(a) based upon the collective teachings of Dahan and the IBMTDB.

The Brief (filed Mar. 16, 2007) (“App. Br.”), the Reply Brief (filed September 24, 2007) (“Reply Br.”) and the Answer (mailed July 23, 2007) (“Ans.”) are referenced in this opinion.

### ISSUE

Appellant primarily disputes the Examiner’s finding (Ans. 3-4) that Dahan teaches “‘wherein the reader can use less than the maximum number of tracks’” as set forth in claim 6 (Reply Br. 2). Appellant contends that disputed phrase refers to the maximum number of tracks that the pickup itself can read at one time; and therefore, the claim requires the pickup to read less than its maximum capability allows. (*Id.*) In other words, Appellant contends that the “maximum number” does not refer to the total number of tracks on an optical disc as the Examiner determined. (*Id.*) Thus, the issue: Did Appellant demonstrate errors in the Examiner’s finding that Dahan teaches “‘wherein the reader can use less than the maximum number of tracks’” as set forth in claim 6?

### PRINCIPLES OF LAW

Appellant has the burden on appeal to the Board to demonstrate error in the Examiner’s position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) (“On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of

nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355(Fed. Cir. 1998)). During examination, the Examiner bears the initial burden of presenting a prima facie case. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). The Examiner's articulated reasoning in the rejection must possess a rational underpinning to support the legal conclusion of obviousness. *Kahn*, 441 F.3d at 988.

### FINDINGS OF FACT (FF)

1. Dahan teaches allocating buffer memory only for tracks (each designated as a channel) read from a multibeam optical pickup during one rotation of an optical disc. (Dahan, col. 5, ll. 38-55, col. 6, ll. 12-17, col. 7, ll. 30-40, Fig. 4B, step 415). Alternatively, memory may be allocated and de-allocated for individual channels or data blocks therein, rather than for an entire rotation (col. 7, ll. 38-40). The maximum number of a maximum data blocks per channel depends on the radial position of the data on the disc, or the number can be otherwise estimated or calculated. For example, an assumed fixed maximum number of blocks (such as 30) is estimated based on CD-ROM formats. (Dahan, col. 9, ll. 4-8, col. 10, ll. 3-15). Memory is allocated for each new rotation (col. 12, ll. 56-62).

2. After reading the tracks, the optical pickup jumps to a new set of tracks to read on the optical disc during the next rotation. (Dahan, col. 6, ll. 53-65, Fig. 4B, step 416, col. 11, ll. 38-40). The pickup may re-read a track of data by overlapping channels (*id.*). Overlapping data blocks (re-read data) help to indicate when all the data has been read, when to move the

pick-up for the next rotation, and how to link data blocks together for placement of the data in memory. (Col. 11, ll. 27-40, col. 12, ll. 41-50).

3. Overlapping or (re-read) data blocks optionally may be discarded to free memory (col. 12, ll. 50-53; Fig. 4B, step 473).

### ANALYSIS

The disputed phrase in claim 6 refers to the maximum number of tracks that the *reader can use*, not the maximum number that the pickup can read at one time. Thus, the claim does not limit the pickup, but rather, reasonably refers to the total number of tracks available to the reader as a whole. Hence, Appellant's argument that the claim requires the *pickup* to read less tracks than the pickup is capable of reading at one time is not commensurate in scope with the claim. "Construing claims broadly during prosecution is not unfair to the applicant...because the applicant has the opportunity to amend the claims to obtain more precise claim coverage." *In re American Academy of Science Tech. Center*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (citing *In re Yamamoto*, 740 F.2d 1569, 1571-72 (Fed. Cir. 1989).

As the Examiner generally found without dispute (Ans. 3-5), Dahan's pickup only reads some (i.e., seven) of the total number of tracks available to the system (i.e., on the disc) at one time, assigns memory to those tracks, and then moves to the next set of tracks for further reading (*see* FF 1, 2, col. 2, ll. 43-45, col. 7, ll. 62-65; col. 11, ll. 38-40). All the tracks (i.e., the maximum number of tracks) on Dahan's disc are eventually accessible by the system or reader (*see* FF 2). Accordingly, Appellant has not demonstrated error in the Examiner's position.

Appellant's assertion that Dahan's system also stores "re-read[]" track data (App. Br. 6) does not explain how Dahan's system fails to meet the claim. Appellant's argument implies that such re-reading somehow means that Dahan's system fails to define only "buffers for data streams for those tracks used" as set forth in the claim (*see id.*). In support of the argument, Appellant asserts that the re-read or duplicated data is removed (*see* App. Br. 6, citing Dahan, col. 6, ll. 50-65, step 473), so that whether or not the "duplicate track" is "'used,'" Dahan's system assigns memory to it (*id.*).

First, any data removal in Dahan is merely optional (FF 3). Moreover, the duplicated or overlapping data, whether discarded or not, is still "used" by Dahan's system. That is, data re-read during each new rotation helps to control the placement of the data in memory, and to determine when the all the data on each track is read so that the pickup may be moved (*see* FF 2). Only such "used" data is allocated to memory (*see* FF 1, 2). Accordingly, only buffers for those data tracks that are used are defined, contrary to Appellant's arguments, *supra*.

Second, Dahan's system allocates blocks of memory per track based on the amount of data blocks estimated per channel on the disc (*see* FF 1). A "used" track, as claimed, is interpreted to be one that has some data on it – even if each track does not actually have the estimated blocks of data allocated thereto. The claim reasonably, at most, requires memory assignment based on expected data on each track being read, as opposed to assignment based on the actual amount of data read in each track (i.e., claim 6 recites "only FIFO buffers for data streams for those *tracks used* are

defined” – emphasis added).<sup>1</sup> Alternatively, Dahan’s system, at a later point of the process, also dynamically reallocates (i.e., defines) memory only for actual data read (*see* FF 1). We further note that Appellant proffers no definition, nor points to anything in the Specification, pertaining to the meaning of “used,” that rises to the level of an argument distinguishing the claim over the combination of Dahan and the IBMTDB.

Therefore, Appellant’s claim does not preclude a similar re-reading (and/or discarding) of data and allocating of memory. Appellant’s assertion, without more, does not rise to the level of an argument demonstrating error in the Examiner’s position, and fails to meet Appellant’s burden on appeal. *See Kahn*, 441 F.3d at 985-86; 37 C.F.R. § 41.37(c)(1)(vii).

## CONCLUSION

Appellant did not demonstrate error in the Examiner’s finding that Dahan teaches “wherein the reader can use less than the maximum number of tracks” as set forth in claim 6.

## DECISION

We affirm the Examiner’s decision rejecting claim 6.

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<sup>1</sup> Our finding is consistent with Appellant’s disclosure. Appellant does not disclose calculating either the actual or expected amount of data per track being read. (*See* Spec. 3). We infer from this lack of disclosure, that Appellant’s disclosed system, like that of Dahan, merely estimates the amount of data per track. (Hence, Appellant’s system likewise does not preclude unused or duplicate data blocks per track.)



Appeal 2008-2851  
Application 10/511,211

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(2006).

AFFIRMED

KIS

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